

PATENT APPLICATION  
Attorney Docket No. Q61126

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Hisashi YAMAGISHI, et al.

Appln. No.: DIV of USSN 09/129,883

Group Art Unit: 3711

Filed: January 19, 2001

For: MULTI-PIECE SOLID GOLF BALL

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

**IN THE SPECIFICATION:**

Page 1, line 19, delete "so as".

Page 2, line 10, delete "and thus" and insert --. Therefore--;

line 24, delete "the";

line 30, delete "to" and insert --an--;

delete "a" and insert --of--;

line 32, delete "we" and insert --the inventors--.

Page 3, line 2, delete "more" and insert --higher--;

line 5, delete "less" and insert --reduced--;

line 6, after "Accordingly," insert --one--;

PRELIMINARY AMENDMENT  
DIV OF USSN 09/129,883

line 19, delete “, and as a” and insert -- A--;  
after “requirement”, insert --is--;  
line 25, delete “We” and insert --The inventors--.

Page 5, line 5, insert --FIG. 4 is a cross-section of the solid golf ball of this invention.--;

line 7, delete “Now the” and insert --The--;  
delete “is” and insert --will now be--;  
line 8, after “ball”, insert --28--;  
line 9, after “core”, insert --20--;  
delete “two” and insert --2n--;  
after “and” (second occurrence), insert --2n--;  
line 10, delete “layers” and insert --layer 14,16--;  
line 11, after “dimples”, insert --1--;  
line 17, after “core”, insert --20--;  
line 34, after “structure”, insert --14,16--;  
line 35, after “core”, insert --20--.

Page 6, line 18, after “layer”, insert --16--;  
line 26, delete “68” and insert --63--;  
line 29, delete “68” and insert --63--.

Page 7, line 13, after “dimples”, insert --1--.

Page 8, line 20, delete “there result” and insert --the result is--.

Page 10, line 16, delete “the” and insert --having--.

PRELIMINARY AMENDMENT  
DIV OF USSN 09/129,883

**IN THE CLAIMS:**

Please amend claims 2 and 3 as follows:

Claim 2,      line 1,      delete "1" and insert --4--.

Claim 3,      line 1,      delete "1 or 2" and insert --4--.

**Please add new claims 4 and 5 as follows:**

--4. A multi-piece solid golf ball comprising; a solid core and a cover consisting of inner and outer layers surrounding the core, the outer cover layer having a surface formed with a plurality of dimples,

said solid core having a distortion of 2.8 to 6.0 mm under load of 100 kg, and

a product of the Shore D hardness of said inner cover layer multiplied by the Shore D hardness of said outer cover layer and a proportion  $V_R$  (%) of the total of the volumes of dimple spaces each defined below a plane circumscribed by the dimple edge to the overall volume of a phantom sphere given on the assumption that the golf ball surface is free of dimples satisfying any one of the following combinations (1) to (5):

- (1) the product of Shore D hardnesses of inner and outer cover layers: 1,500 to less than 2,000

$V_R$ : 0.82 to 1.08%

- (2) the product of Shore D hardnesses of inner and outer cover layers: 2,000 to less than 2,500

$V_R$ : 0.77 to 1.03%

- (3) the product of Shore D hardnesses of inner and outer cover layers: 2,500 to less than 3,000

$V_R$ : 0.72 to 0.98%

- (4) the product of Shore D hardnesses of inner and outer cover layers: 3,000 to less than 3,500

PRELIMINARY AMENDMENT  
DIV OF USSN 09/129,883

$V_R$ : 0.67 to 0.93%

(5) the product of Shore D hardnesses of inner and outer cover layers: 3,500 to 4,000

$V_R$ : 0.62 to 0.88%,

and the total number of said dimples being 370 to 450, and said dimples including at least three types of dimples which are different in at least one of a diameter, a depth, and a value  $V_O$  which is the volume of one dimple space defined below a plane circumscribed by the dimple edge divided by the volume of a cylinder whose bottom is the plane and whose height is the maximum depth of the dimple from the bottom.--

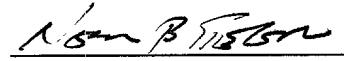
--5. The multi-piece solid golf ball of claim 4, wherein the hardness of the inner or outer cover layers is up to 63 in Shore D hardness.--

**REMARKS**

This preliminary amendment is filed to advance the prosecution of parent case 09/129,883, currently pending. The change to page 6 at lines 26 and 29 corrects an error in the specification and places that upper limit of hardness for the inner cover layer consistent with that found in original claim 3.

New claims 4 and 5 set forth preferred ranges consistent with the disclosure as originally filed. Claim 4 is consistent with the disclosure on page 8 and the number of dimples is identified on page 11, line 5. An action on the merits is respectfully requested.

Respectfully submitted,

  
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